Detction of spurious BT Cotton seeds

1344. SHRIMATI N.P. DURGA: Will the Minister of AGRICULTURE be pleased to state:

(a) whether it is a fact that Central Institute for Cotton Research has developed a kit which helps in detecting spurious Bt Cotton seeds;

(b) if so, the details of the research; and

(c) how it exactly helps the illiterate farmers in detecting spurious Bt Cotton seeds?

THE MINISTER OF STATE IN THE MINISTRY OF AGRICULTURE (SHRI HUKUMDEO NARAYAN YADAV): (a) Yes, Sir.

(b) Four kits have been developed to help the detection of spurious Bt. Seeds. Three kits (Bt-express, Bt-Quant and Bt-detect) are based on immunoassays and the fourth kit is through PCR-DNA.

(c) The test can be done in the field or at home on seeds, leaf, stem on any tissue of the plant. The Bt-express kit contains Bt-express strips, plastic vials containing buffer, a plastic pestle and pictorial instructions. For detection in the seed, the seed has to be crushed and seed coat has to be discarded. The white cotyledons are to be placed into a vial containing buffer and crushed well. The Bt-express strip is placed in the vial (dipping the green end of the strip into the solution). After 5 minutes, two purple coloured bands will appear if it is Bt-seed and only one band will appear if it is non-Bt type.

Demand and production of pulses and oilseeds

†1345. SHRI KRIPAL PARMAR: Will the Minister of AGRICULTURE be pleased to state:

(a) the projected demand and actual production of pulses and oilseeds during the last three years and their import, year-wise;

(b) the projected production and demand of oilseeds and pulses for the next three years;

†Original notice of the question was received in Hindi.